WHAT IS CLAIMED IS:

1. A recording medium comprising on an ink-recording surface side an ink-receiving layer that contains at least a pigment for retaining a coloring material of ink and a binder for the pigment,

wherein the ink-receiving layer includes a first layer region where the binder is cross-linked by a first crosslinking agent to become uniform relative to the pigment; and a second layer region where the binder is cross-linked by a second crosslinking agent such that the degree of crosslinking of the second layer region is larger than that of the first layer region, and

wherein the first layer region is located closer to the ink-recording surface side than the second layer region.

2. A recording medium according to claim 1, wherein

the first crosslinking agent and the second crosslinking agent contain the same element; and

the degree of crosslinking is a relative quantitative difference between the element in the first layer region and the element in the second layer region, which is brought about by the first and second crosslinking agents.

3. A recording medium according to claim 1, wherein the ink-receiving layer is formed by applying a coating liquid on a wet surface, the coating liquid being prepared by dissolving and mixing at least alumina hydrate as the pigment, polyvinyl alcohol as the binder and ortho-boric acid as the first crosslinking agent for the formation of the first layer region, the wet surface containing tetraborate as the second crosslinking agent for the formation of the second layer region.

4. A recording medium according to claim 3, wherein the content of the ortho-boric acid contained in the coating liquid per unit area is less than the content of the sodium tetraborate contained in the wet surface per unit area.

5. A recording medium according to claim 1, wherein the pigment is alumina hydrate, the binder is polyvinyl alcohol, the first and second crosslinking agents contain the same boron "B" and the content of boron "B" in the second layer region is at least twice as high as the content of boron "B" in the first layer region.

6. A recording medium according to any one of claims 1 to 5, wherein the ink-receiving layer has a

weight of 30 g/m^2 or more.

7. A recording medium comprising on an ink-recording surface side an ink-receiving layer that contains at least a pigment retaining at least a coloring material of ink and showing variations in viscosity depending on pH and a binder for the pigment,

wherein the ink-receiving layer includes a first layer region where the binder is cross-linked by a first crosslinking agent having a pH value for retaining the pigment at a low viscosity and a second layer region in which the binder is cross-linked by a second crosslinking agent having a pH value for retaining the pigment at a high viscosity, and

wherein the first layer region is located closer to the ink-recording surface side than the second layer region.

8. A recording medium according to claim 7, wherein the second layer region has a larger degree of crosslinking than that of the first layer region due to the second crosslinking agent.

9. A recording medium according to claim 8, wherein the pigment is a pigment showing a low viscosity at a comparatively low pH value and

changing into a high-viscous pigment at a comparatively high pH value, and

wherein the first layer region is formed by applying a coating liquid having a low pH value prepared by dissolving and mixing the pigment, the binder, and the first crosslinking agent on a wet surface having a high pH value and containing the second crosslinking agent.

10. A recording medium comprising on an ink-recording surface side an ink-receiving layer that contains at least a pigment and a binder for the pigment, the pigment retaining a coloring material of ink and showing a low viscosity at a comparatively low pH value and changing into a high-viscous pigment at a comparatively high pH,

wherein the ink-receiving layer includes a first layer region where the binder is cross-linked by a first crosslinking agent having a pH value for retaining the pigment at a low viscosity and a second layer region in which the binder is cross-linked by a second crosslinking agent having a pH value for retaining the pigment at a high viscosity, and

wherein the first layer region is located closer to the ink-recording surface side than the second layer region, and the pH of the first layer region is lower than the pH of the second layer

region.

11. A recording medium according to claim 10, wherein the ink-receiving layer is formed by applying a coating liquid on a wet surface, the coating liquid being prepared by dissolving and mixing at least alumina hydrate as the pigment, polyvinyl alcohol as the binder and ortho-boric acid as the first crosslinking agent for the formation of the first layer region, and the wet surface containing tetraborate as the second crosslinking agent for the formation of the second layer region.

12. A recording medium according to claim 11, wherein the content of the ortho-boric acid in the coating liquid per unit area is less than the content of the sodium tetraborate in the wet surface per unit area.

13. A recording medium according to claim 11, wherein the pigment is alumina hydrate, the binder is polyvinyl alcohol, the first cross-linking agent and the second crosslinking agent contain the same boron "B" and the content of boron "B" in the second layer region is at least twice as high as the content of boron "B" in the first layer region.

14. A recording medium according to any one of claims 11 to 13, wherein the ink-receiving layer is of 30 g/m^2 or more.

15. A method of manufacturing a recording medium having an ink-receiving layer that contains a pigment and a binder for the pigment, comprising a step of applying a coating liquid including the pigment, the binder, and a first crosslinking agent for crosslinking the binder on a wet surface that contains a second crosslinking agent for cross-linking the binder,

wherein a crosslinking reaction at a contact interface between the coating liquid and the wet surface by the second crosslinking agent is accelerated more than a crosslinking reaction by the first crosslinking agent in the coating liquid.

16. A method of manufacturing a recording medium according to claim 15, wherein the pigment is a pigment that shows variations in viscosity depending on pH, the first crosslinking agent is a crosslinking agent that provides a pH value for retaining the pigment at a low viscosity, the second crosslinking agent is a crosslinking agent that provides a pH value for retaining the pigment at a high viscosity, and

wherein a change of pH is generated at the contact interface to cause aggregation of pigments and crosslinking of the binder.

17. A method of manufacturing a recording medium having an ink-receiving layer that contains a pigment showing a low viscosity at a comparatively low pH value and showing a high viscosity at a comparatively high pH value, and a binder for the pigment, comprising a step of applying a coating liquid on a wet surface, the coating liquid containing the pigment, the binder, and a first crosslinking agent for crosslinking the binder and showing a low pH value to have the above low viscosity, and the wet surface containing a second crosslinking agent for crosslinking the binder and showing a high pH value to have the high viscosity.

18. A method of manufacturing a recording medium according to any one of claims 15 to 17, wherein the wet surface is a liquid surface prepared by applying a liquid containing the second crosslinking agent on a surface of a substrate that constitutes the recording medium, the surface of the substrate being coated with a pre-treatment liquid containing the second crosslinking agent followed by being dried and fixed.

19. A method of manufacturing a recording medium according to any one of claims 15 to 17, wherein the second crosslinking agent is superior in crosslinking reaction to the first crosslinking agent for crosslinking the binder.

20. A method of manufacturing a recording medium according to any one of claims 15 to 17, wherein the content of the first crosslinking agent per unit area in the coating liquid is less than the content of the second crosslinking agent per unit area in the wet surface.

21. A method of manufacturing a recording medium according to any one of claims 15 to 17, wherein the pigment is alumina hydrate, the binder is polyvinyl alcohol, the first crosslinking agent and the second crosslinking agent contain the same boron "B" and the content of boron "B" in the second layer region is at least twice as high as the content of boron "B" in the first layer region.

22. A method of manufacturing a recording medium having an ink-receiving layer, comprising:

a first surface treatment step in which a first coating liquid containing at least one crosslinking agent selected from the group consisting of boric

acid and borate is applied followed by being dried to fixed;

a second surface treatment step in which a second coating liquid containing at least one crosslinking agent selected from the group consisting of boric acid and borate is applied on the fixed surface formed in the first surface treatment step; and

a third surface treatment step in which a third coating liquid containing at least a pigment, polyvinyl alcohol, and one crosslinking agent selected from the group consisting of boric acid and borate is applied while the second coating liquid retains a wet condition.

23. A method of manufacturing a recording medium according to claim 22, wherein the pigment contains alumina hydrate, and the ink-receiving layer is of 30 g/m^2 or more.

24. A method of manufacturing a recording medium according to claim 22 or 23, further comprising a step of casting the ink-receiving layer obtained after the step of coating the third coating liquid.

25. A method of manufacturing a recording

medium according to any one of claims 15 to 17, 22, and 23, wherein the recording medium contains as a substrate for supporting the ink-receiving layer a porous member through which liquid components of the coating liquid can penetrate.

26. A method of manufacturing a recording medium according to any one of claims 15 to 17, 22, and 23, wherein the wet surface has a recessed portion for the coating liquid without having a uniform surface such that the crosslinking of the binder occurs in the recessed portion.